APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,669	03/10/2004	Vinay Gupta	112056-0151U	4140

24267	7590	12/15/2006

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EXAMINER
RADTKE, MARK A

ART UNIT	PAPER NUMBER
2165	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/797,669	GUPTA ET AL.
	Examiner	Art Unit	
	Mark A. X Radtke	2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 February 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-32</u> is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-32</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>10 March 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date <u>20040514, 20050202</u>.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Specification

1.   The disclosure is objected to because of the following informalities:

a.   At page 5, line 2, the number "[112056-0152]" is not a valid U.S. Patent

Application Number. They are typically of the form "10/123,456".

Appropriate correction is required.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of
> matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the
> conditions and requirements of this title.

3.   Claims 1-26 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. The claims are directed towards computer

software *per se* and so are non-statutory. To be patentable, computer software claims

must be tangibly embodied on hardware and produce a tangible result.

4.   Claims 27-32 are rejected under 35 U.S.C. 101 because the claimed invention is

directed to non-statutory subject matter. Method claims must produce a useful, concrete

and tangible result. The result of "executing a cfmode command" is intangible because

it only invokes a computer program and such an operation is undetectable by the user.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States. ~TM 12/1/06 .

6.   Claims 1-4, 6-22 and 28-32 are rejected under 35 U.S.C. 102(b) as being

anticipated by Blumenau (U.S. Pat. No. 6,421,711).

        As to claim 1, Blumenau teaches a system adapted to simplify management of a

clustered storage system having a plurality of failover modes (see Abstract), the system

comprising:

        a user interface system that defines one of a plurality of failover modes (see

columns 28-31, "Graphical User Interface for Virtual Ports" and see column 34, line 60 –

column 35, line 6); and

        a command set implemented by the user interface system and including a

command for setting a cluster mode (see column 33, lines 29-52).

As to claim 2, <u>Blumenau</u> teaches wherein the user interface system comprises a command line interface (CLI) adapted to support the command set (see columns 28-31, "Graphical User Interface for Virtual Ports").

As to claims 3 and 20-21, <u>Blumenau</u> teaches wherein the command set further comprises an igroup command that determines whether a set of initiators may utilize data access command proxying (see columns 12-21, "Storage Volume Partitioning by Named Groups", where "initiators" is read on "hosts").

As to claims 4 and 22, <u>Blumenau</u> teaches wherein the set of initiators comprises at least one fibre channel world wide name (see figure 5, column "Host Controller WWN" and see also column 13, lines 33-34, "host controller port WWN").

As to claim 6, <u>Blumenau</u> teaches wherein the igroup command sets an igroup option to determine whether members of a set of initiators may use a partner port for proxying data access command (see column 15, lines 34-60 and see column 2, line 56 – column 3, line 18).

As to claims 7 and 11, <u>Blumenau</u> teaches wherein the command set further comprises a cfmode command that sets a cluster mode for the clustered storage system (see column 12, line 65 – column 13, line 6).

As to claims 8, 14, 24 and 28, <u>Blumenau</u> teaches wherein the cluster mode enables the clustered storage system to proxy data access requests received by a first storage system in the clustered storage system to a second storage system in the clustered storage system (see column 15, lines 34-60 and see column 2, line 56 – column 3, line 18 and see column 17, line 9 – column 18, line 5 and see column 10, lines 16-51).

As to claims 9, 15, 25 and 29, <u>Blumenau</u> teaches wherein the cluster mode enables a first storage system in the clustered storage system to assume an identity of a second storage system in the clustered storage system (see column 11, lines 31-56).

As to claims 10 and 26, <u>Blumenau</u> teaches wherein the cluster mode enables proxying of data access requests received by a first storage system in the clustered storage system to a second storage system in the clustered storage system and further enables the first storage system to assume an identity of the second storage system (see column 15, lines 34-60 and see column 2, line 56 – column 3, line 18 and see column 17, line 9 – column 18, line 5 and see column 10, lines 16-51 and see column 11, lines 31-56).

As to claims 12, 16-18 and 30-32, <u>Blumenau</u> teaches wherein the user interface system further comprises a graphical user interface having functionality to implement the command set (See columns 28-31, "Graphical User Interface for Virtual Ports". The

phrase "having functionality to" renders the rest of the claim as intended use because the limitations are not positively recited. The limitation of "to implement the command set" will not be given patentable weight, although it is taught by <u>Blumenau</u>.).

As to claim 13, <u>Blumenau</u> teaches a method for simplifying management of a clustered storage system having a plurality of failover modes (see Abstract), the method comprising the steps of:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 7 above.

As to claim 19, <u>Blumenau</u> teaches a system adapted to simplify management of a clustered storage system having a plurality of failover modes (see Abstract), the system comprising:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 2 above.

As to claim 27, <u>Blumenau</u> teaches a computer readable medium, including program instructions executing on a computer, for simplifying management of a clustered storage system having a plurality of failover modes (see Abstract), the computer readable medium including instructions for performing the steps of:

For the remaining steps of this claim applicant(s) is/are directed to the remarks and discussions made in claim 7 above.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 5 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Blumenau, as applied to claims 3 and 21, further in view of Clark ("IP SANs: A Guide to

iSCSI, iFCP, and FCIP Protocols for Storage Area Networks", Published 26 November

2001, Section 8.5, "Internet SCSI").

As to claims 5 and 23, Blumenau teaches wherein the set of initiators comprises

one or more identifiers (see columns 9-11, "WWN").

Blumenau does not explicitly teach wherein the identifiers are iSCSI identifiers.

Clark teaches wherein the identifiers are iSCSI identifiers (see pages 2-4, "iSCSI

Address and Naming Conventions").

Therefore, it would have been obvious to one of ordinary skill in the relevant art

at the time the invention was made to have modified Blumenau by the teaching of Clark

because iSCSI is a well-known alternative to Fibre Channel technology and "the iSCSI

specification allows for a lower functional level on top of IP to provide services such as

IPSec data encryption" (see page 2, section 8.5.2, paragraph 2).

Additional References

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

The following patents are cited to further show the state of art with respect to

clustering GUIs in general:

Doc. No.	Assigned to
US 20020016827 A1	McCabe, Ron et al.
US 20050195660 A1	Kavuri, Ravi K. et al.
US 20060218362 A1	McManis; Charles E.
US 20030189930 A1	Terrell, William C. et al.
US 20060023707 A1	Makishima; Dennis Hideo et al.
US 7065611 B2	Kano; Yoshiki
US 6996587 B2	Wagener; Peter J. et al.
US 20050114315 A1	Tanner, David Anthony et al.

"GUI vs. CLI: A Qualitative Comparison" by Greg Afinogenov

"Red Hat Cluster Suite: Configuring and Managing a Cluster", Chapter 1

"Cisco Fabric Manager", Data Sheet

"Delivering High Availability Solutions with Red Hat Cluster Suite"

"man/na_fcp(1) manual page"

"Unix man pages : fcp"

"Configuring Fibre Channel Interfaces"

"iSCSI-Root mini-HOWTO"

Conclusion

10.   Any inquiry concerning this communication or earlier communications should be directed to the examiner, Mark A. Radtke. The examiner's telephone number is (571) 272-7163, and the examiner can normally be reached between 9 AM and 5 PM, Monday through Friday.
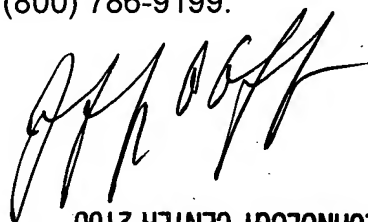
If attempts to contact the examiner are unsuccessful, the examiner's supervisor, Jeffrey Gaffin, can be reached at (571) 272-4146.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to Customer Service at (800) 786-9199.

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9 December 2006

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SUPERVISORY PATENT EXAMINER
JEFFREY GAFFIN